

REMARKS

Claims 2-11 and 17-18 were pending in this application. By this response, Applicant has amended claims 6 and 18. Accordingly, claims 2-11 and 17-18 are submitted for reconsideration.

In the Office Action, claims 6 and 18 were rejected as indefinite under 35 U.S.C. § 112, ¶ 2. Present, claims 6 and 18 are not subject to the Examiner's stated concerns, however. In particular, claim 6 has been amended to clarify that the source material is provided by chemical vapour deposition. Claim 18 has been amended to clarify that the source heating the surface of the optical fiber is separated from the optical fiber. Accordingly, Applicant requests that this rejection be withdrawn.

Claims 2-7 and 18 were rejected for lack of enablement under 35 U.S.C. § 112, ¶ 1. The Examiner has asserted that the specification does not reasonably provide enablement for "all non-planar substrates." Applicant respectfully disagrees. First of all, base claim 17 recites, *inter alia*, the manufacturing of a substantially continuous circumferential coating on a non-planar substrate that has an external circumferential surface. Accordingly, the non-planar substrate recited in the claims is limited to non-planar substrates having an external circumferential surface and upon which a continuous circumferential coating is formed. An optical fiber is merely an example of such a non-planar substrate having an external circumferential surface, which is clearly described and enabled in the specification of the present application. Accordingly, Applicant submits that the claims are in conformance with 35 U.S.C. § 112, ¶ 1.

Moreover, there is no requirement under 35 U.S.C. § 112, ¶ 1 to describe how to enable "all non-planar substrates." Rather, the test of enablement is whether one skilled in the art could make or use the invention from the disclosure in the patent in combination with information known in the art without undue experimentation. *See United States v. Telecommunications, Inc.*, 857 F.2d 778, 785 (Fed. Cir. 1988). This test is not whether any experimentation is necessary, but rather whether a necessary experimentation is undue. *See In re Angstadt*, 537 F.2d 498, 504 (C.C.P.A. 1976). In accordance with MPEP § 2164.04, the Examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. At a minimum, the Examiner is required to give reasons for the uncertainty of the enablement. *See*

In re Bowen, 492 F.2d 859, 862-63 (C.C.P.A. 1974). In the rejection, the Examiner has not set forth any reason why the scope of claim 17 (the only independent claim) is not enabled or why it would require undue experimentation. Accordingly, for all of these reasons, the rejection under 35 U.S.C. § 112, ¶ 1 should be withdrawn.

Lastly, the Examiner rejected claims 2-11 and 17-18 under 35 U.S.C. § 103(a) over Winn et al. (U.S. Patent No. 5,168,540) in combination with Donckel et al. (U.S. Patent No. 3,860,444). Claim 17 recites that a method of manufacturing a substantially continuous circumferential coating on a non-planar substrate comprises, *inter alia*, heating the non-planar substrate in a static substrate deposition geometry. The method heats the substrate in a manner such that an external circumferential surface on the non-planar substrate remains exposed to an extent sufficient to form the continuous coating thereon, and to a temperature sufficient for decomposition of a gaseous precursor material.

As noted by the Examiner in the rejection, Winn et al. discloses gluing the fiber to the holder. Since the fiber is glued to the holder, the fiber necessarily does not have an external circumferential surface exposed to an extent sufficient to form a continuous coating thereon, as recited in claim 17. Accordingly, claim 17 is patentably distinguishable from the combination of Winn et al. and Donckel et al.

Claims 2-11 and 18 also are patentably distinguishable from the combination of Winn et al. and Donckel et al. by virtue of their dependence from claim 17, as well as their additional recitations. For example, the Examiner acknowledges that Winn et al. teaches gluing the fiber to the holder and fails to disclose or suggest clamping the fiber substrate, the Examiner asserts that one skilled in the art would have had a reasonable expectation of achieving similar results regardless of the holding mechanism used. The Examiner further asserts that the use of clamps to hold a substrate such as a fiber for coating is conventional in the coating art.

Applicant respectfully disagrees with the Examiner's assertions. First of all, the Examiner has not provided any reason, teaching or suggestion that using glue instead of clamps would achieve similar results. In fact, as discussed above, gluing the fiber to the holder cannot provide for an external circumferential surface to be exposed to an extent sufficient to form a continuous coating thereon, as recited in claim 17. Moreover, the Examiner has not cited any reference nor provided any teaching or suggestion that the use of

clamps to hold a substrate such as a fiber for coating is conventional in the coating art. Without such a reference, the Examiner has not made a *prima facie* case of obviousness. Accordingly, the rejection of the pending claims over the cited references should be withdrawn.

Applicant believes that the present application is now in condition for allowance. Favorable consideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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Version with Markings to Show Changes Made

6. (Twice Amended) A method as claimed in claim [1] 17 wherein the [non directional deposition technique comprises] source material is provided by chemical vapour deposition.

18. (Amended) A method in accordance with claim 8, wherein the optical fiber is separated from [the] a source heating the surface of the optical fiber by a gap large enough to allow the vapor to envelop the surface of the fiber but small enough to allow the surface of the fiber to be heated to the deposition temperature by the heating surface.